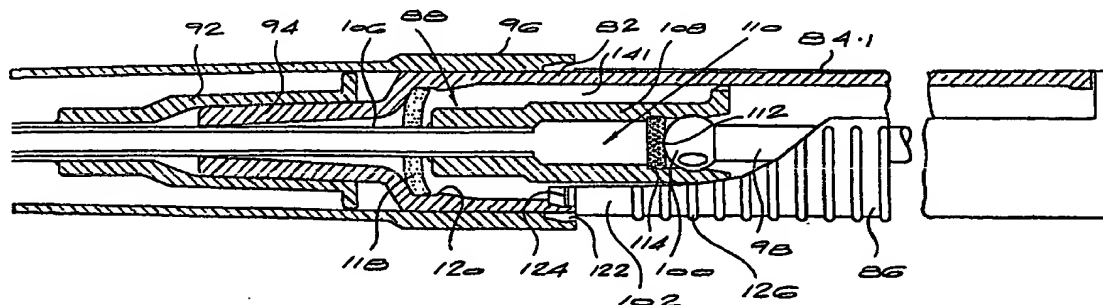


INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁷ : A61M 25/06, 5/32	A1	(11) International Publication Number: WO 00/54831 (43) International Publication Date: 21 September 2000 (21.09.00)
(21) International Application Number: PCT/IB00/00287 (22) International Filing Date: 17 March 2000 (17.03.00) (30) Priority Data: 99/2146 17 March 1999 (17.03.99) ZA (71)(72) Applicants and Inventors: DUGMORE, Peter, Balfour [ZA/ZA]; 4 Swanmore Road, Rondebosch, 7700 Cape Town (ZA). BULL, Anthony, Eric [ZA/ZA]; 31 Grotto Road, Rondebosch, 7700 Cape Town (ZA). REYNOLDS, Stanford, William, Gladwin [ZA/ZA]; 18 Hopson Road, 3630 Westville (ZA). (74) Agents: GILSON, David, Grant et al.; Spoor and Fisher, Rochester Place, 173 Rivonia Road, Morningside, Sandton, P.O. Box 41312, 2024 Craighall (ZA).		(81) Designated States: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i>

(54) Title: A SAFETY ASSEMBLY FOR A HYPODERMIC APPLICATOR SET
**(57) Abstract**

A cannula safety assembly (82) includes a cannula safety shield (84) and an elongate retractor (86). The retractor (86) is provided with a central plunger (98) which extends through a rear open end (85) of the safety shield and a pair of caliper arms (102) which fit over the safety shield. A needle assembly (88) includes a needle seat (108) from which a hollow needle (106) extends so that the needle assembly (88) is mounted detachably to the front end of the plunger (98), and the needle shield (96) is fitted over the front end of the safety shield, and mounted detachably to the ends of the caliper arms (102). The needle assembly (88) is slidably moveable in concert with the retractor (86) from an extended administrable position to a retracted position in which the needle (106) is fully withdrawn into the safety shield chamber by the retractor to be held safely captive within the chamber. The retractor is separable from the needle seat when in the retracted position. The invention extends to a method of manufacturing a cannula safety assembly.

FOR THE PURPOSES OF INFORMATION ONLY

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

AL	Albania	ES	Spain	LS	Lesotho	SI	Slovenia
AM	Armenia	FI	Finland	LT	Lithuania	SK	Slovakia
AT	Austria	FR	France	LU	Luxembourg	SN	Senegal
AU	Australia	GA	Gabon	LV	Latvia	SZ	Swaziland
AZ	Azerbaijan	GB	United Kingdom	MC	Monaco	TD	Chad
BA	Bosnia and Herzegovina	GE	Georgia	MD	Republic of Moldova	TG	Togo
BB	Barbados	GH	Ghana	MG	Madagascar	TJ	Tajikistan
BE	Belgium	GN	Guinea	MK	The former Yugoslav Republic of Macedonia	TM	Turkmenistan
BF	Burkina Faso	GR	Greece	ML	Mali	TR	Turkey
BG	Bulgaria	HU	Hungary	MN	Mongolia	TT	Trinidad and Tobago
BJ	Benin	IE	Ireland	MR	Mauritania	UA	Ukraine
BR	Brazil	IL	Israel	MW	Malawi	UG	Uganda
BY	Belarus	IS	Iceland	MX	Mexico	US	United States of America
CA	Canada	IT	Italy	NE	Niger	UZ	Uzbekistan
CF	Central African Republic	JP	Japan	NL	Netherlands	VN	Viet Nam
CG	Congo	KE	Kenya	NO	Norway	YU	Yugoslavia
CH	Switzerland	KG	Kyrgyzstan	NZ	New Zealand	ZW	Zimbabwe
CI	Côte d'Ivoire	KP	Democratic People's Republic of Korea	PL	Poland		
CM	Cameroon	KR	Republic of Korea	PT	Portugal		
CN	China	KZ	Kazakstan	RO	Romania		
CU	Cuba	LC	Saint Lucia	RU	Russian Federation		
CZ	Czech Republic	LI	Liechtenstein	SD	Sudan		
DE	Germany	LK	Sri Lanka	SE	Sweden		
DK	Denmark	LR	Liberia	SG	Singapore		
EE	Estonia						